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- 8. The system of claim 1, wherein the at least one hollow member comprises at least one sheet of flexible and substantially inelastic material having a first longitudinal end and a second longitudinal end wherein the first longitudinal end and the second longitudinal end are attached.
- 9. The apparatus of claim 8, wherein the at least one hollow member further comprises a second hollow member adapted to receive a second blood pressure cuff in a second cuff volume area and to limit the maximal diameter and to limit the maximal volume to which the second cuff may 10 expand, and
  - wherein the second hollow member is supported by a region of attachment between two portions of the least one sheet of flexible and substantially inelastic material.
- 10. The apparatus of claim 8, wherein a first hollow member of the at least one hollow member limits the blood pressure cuff to a volume less than approximately 100 ml and a second hollow member of the at least one hollow member limits the blood pressure cuff to a volume less than 20 approximately 400 ml.
- 11. A system for testing a non-invasive blood pressure measurement device comprising:
  - a blood pressure monitor;
  - a blood pressure cuff;
  - a blood pressure simulator; and
  - at least one hollow member having an aperture adapted to limit the maximal diameter and the maximal volume to which the blood pressure cuff may expand during testing; and
  - wherein the blood pressure monitor, the blood pressure cuff, and the blood pressure simulator are pneumatically connected during testing and the blood pressure cuff is placed inside the aperture of the at least one hollow member.
- 12. The system of claim 11, wherein the at least one hollow member is tubular.
- 13. The system of claim 11, wherein the at least one hollow member is cylindrical.
- **14**. The system of claim **11**, wherein the at least one 40 hollow member is flexible and inelastic.
- 15. The system of claim 11, wherein the at least one hollow member comprises at least one sheet of flexible and substantially inelastic material having a first longitudinal

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end and a second longitudinal end wherein the first longitudinal end and the second longitudinal end are attached.

- 16. The system of claim 15, wherein the at least one hollow member further comprises a second hollow member adapted to receive a second blood pressure cuff in a second cuff volume area and to limit the maximal diameter and to limit the maximal volume to which the second cuff may expand, and
  - wherein the second hollow member is supported by a region of attachment between two portions of the least one sheet of flexible and substantially inelastic material
- 17. The apparatus of claim 15, wherein a first hollow member of the at least one hollow member limits the blood pressure cuff to a volume less than approximately 100 ml and a second hollow member of the at least one hollow member limits the blood pressure cuff to a volume less than approximately 400 ml.
- **18**. A method for testing a non-invasive blood pressure measurement device pneumatically connected to a blood pressure cuff, a blood pressure simulator, and a blood pressure monitor, the method comprising the steps of:
  - placing the blood pressure cuff into an aperture of cuff volume constraining element wherein the cuff volume constraining element is adapted to limit the diameter and volume to which the blood pressure cuff may expand during testing; and
  - pneumatically expanding the blood pressure cuff while the blood pressure simulator simulates a test subject.
- 19. The method of claim 18, wherein the cuff volume constraining element comprises two connected hollow members.
- 20. The method of claim 18, wherein the step of placing the blood pressure cuff into an aperture of cuff volume constraining element wherein the cuff volume constraining element is adapted to limit the diameter and volume to which the blood pressure cuff may expand during testing.
  - 21. The method of claim 18, wherein the step placing the blood pressure cuff into an aperture of cuff volume constraining element includes the step of forming the aperture about the blood pressure cuff via a detachable seam.

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